

## **DESCRIPTION OF THE FIGURES**

Figure 1 illustrates a top view of a rotary synthesizer 1.

Figure 2 illustrates a cross sectional view of synthesizer 1.

Figure 3 illustrates the cartridge with top plate removed revealing the top chamber seal.

Figure 4 illustrates a detailed view of a cartridge for synthesizer 1.

Figure 5 illustrates an exemplary drain plate of synthesizer 1.

Figure 6 illustrates top view of drain plate gaskets with cut-outs.

Figure 7 illustrates a side view of a drain plate gasket situated between cartridge and drain plate.

Figure 8 illustrates a cross-sectional view of the waste tube system.

Figure 9 illustrates a stationary tube, a mobile waste tube and a chamber bowl of the waste tube system.

Figure 10 illustrates a cross sectional view of a synthesis column.

Figure 11 illustrates a computer system coupled to the synthesizer.

Figure 12 illustrates three cross-sectional detailed views of the assembly comprising the cartridge, the drain plate gasket and the drain plate with a synthesis column within a receiving hole of cartridge.

Figure 13 illustrates a reagent dispensing station.